

What is claimed is:

1. A dentifrice or dentifrice phase comprising sodium bicarbonate, an anionic component reactive with sodium and water to form hydrated crystals, a water content of at least 5 wt. % based on the weight of the dentifrice, at least one of a humectant, thickener, abrasive, or other dissolved species, said dentifrice having a water activity of less than about 0.60.
- 10 2. The dentifrice or dentifrice phase of claim 1 wherein said water content is at least 7 wt. % based on the weight of the dentifrice.
- 15 3. The dentifrice or dentifrice phase of claim 1 wherein said anionic species is a pyrophosphate or polyphosphate anti-tartar agent.
- 20 4. The dentifrice or dentifrice phase of claim 1 wherein said anionic species is an orthophosphate, and wherein said dentifrice further includes a water-soluble or partially water-soluble calcium salt kept separate from said orthophosphate.

5. The dentifrice or dentifrice phase of claim 1 wherein said sodium bicarbonate is present in amounts of from about 7 to 65 % by weight of the formulation.
- 5 6. The dentifrice or dentifrice phase of claim 1 including a humectant in amounts of at least 10 weight % relative to the weight of the dentifrice.
7. The dentifrice or dentifrice phase of claim 6 further including a thickener in amounts of from about 0.1 to 10 weight %.
- 10 8. The dentifrice or dentifrice phase of claim 1 further including a fluoride salt.
9. The dentifrice or dentifrice phase of claim 7 comprising at least 7 weight % of water.
- 15 10. The dentifrice or dentifrice phase of claim 9 further including a fluoride salt.
- 20 11. The dentifrice or dentifrice phase of claim 1 further including a surfactant.

12. The dentifrice or dentifrice phase of claim 1 in the form of a toothpaste.
13. The dentifrice or dentifrice phase of claim 1 in the form of a dental cream or gel.
14. The dentifrice or dentifrice phase of claim 3 wherein said pyrophosphate is a mono, di, tri, or tetra-alkali metal pyrophosphate.
15. The dentifrice or dentifrice phase of claim 4 wherein said orthophosphate includes the alkali metal and ammonium salts of orthophosphoric acid.
16. The dentifrice or dentifrice phase of claim 3 wherein said pyrophosphate salt is present in amounts of from about 1.5 to 15% by weight of the formulation.
17. The dentifrice or dentifrice phase of claim 3 wherein said sodium bicarbonate is present in amounts of from about 7 to 65 % by weight of the formulation.

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18. The dentifrice or dentifrice phase of claim 4 wherein said sodium bicarbonate is present in amounts of from about 7 to 65 % by weight of the formulation.

5        19. The dentifrice or dentifrice phase of claim 17 including a humectant in amounts of at least 10 weight % relative to the weight of the dentifrice.

20. The dentifrice or dentifrice phase of claim 18 including a humectant in amounts of at least 10 weight % relative to the weight of the dentifrice.

10      21. The dentifrice or dentifrice phase of claim 19 further including a thickener in amounts of from about 0.1 to 10 weight %.

15      22. The dentifrice or dentifrice phase of claim 20 further including a thickener in amounts of from about 0.1 to 10 weight %.